The New Economy

- Is the New Global Economy
 Leaving State-Local Tax
 Structures Behind? (1998)
 commissioned by NLC, NCSL, and NGA.
- Governance in the Digital Age (June 1999) commissioned by CSG, ICMA, NACo, NGA, NCSL, NLC, and USMC.

Rhetorical Policy Question

 Does the current state-local tax structure— created in the 1930s based on the old, industrial economy— match the new, digital economy based on knowledge, information, and services?

Public Finance Challenges

- Will electronic commerce be treated the same as physical transactions?
- What should be taxed in the future as production and consumption are liberated from the tyranny of geography?
- Can we preserve state autonomy when the networked economy pushes society toward uniform standards and common protocols?

Social Context for Digital Revolution

- Economic transformation (from goods production to knowledge-based services)
- Global forces driving capital mobility (both firms and knowledge workers can locate anywhere throughout the world)
- Changing Nature of Work
- Electronic Commerce
- Deregulation of Telecom and Electric Industries
- Aging of America

ic Irends/Current Attai

"With compelling detail and insight, the author beckens us to the 'sunny uplands' of the Communications Revolution. She makes us redouble our efforts to change laws and encourage business anward to the hopeful tomorrows that she lucidly describes."

Reed E. Hundt, Chairman, Federal Communications Commission

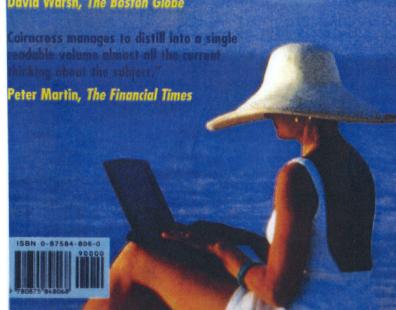
The Death of Distance is a terrific book. Cairncross brings an easy-to-reastyle, a historical perspective, and cogent research and analysis to the communications, media, and computer industries. Whether discussing the monopolistic nature of these businesses or the effect of new media on U.S. and world economies, or on democracy itself, she covers her topics thoroughly."

Michael R. Bloomberg, CEO and Founder, Bloomberg L.P.

Cairneross is...a peripatetic reporter and a lucid writer....[The Death of Distance is] fascinating reading."

David Warsh, The Boston Globe

ston, Massachusetts 02163



"If you want to know what is going on now in the information and communications technologies, and how they will impact the industry and our society in the not so distant future, this book is essential reading."

- RUPERT MURDOCH

Chairman and Chief Executive, The News Corporation

DEATH DEATH DISTANCE

How the Communications Revolution Will Change Our Lives

FRANCES

OF THE ECONOMIST

What Is Electronic Commerce?

 The GOOD—Information technologies can improve service delivery, achieve efficiencies, provide more choices to citizens, facilitate reengineering, and transform organizational operations and structures.

What Is Electronic Commerce?

• The BAD—The potential loss of public sector revenues from electronic transactions.

What Is Electronic Commerce?

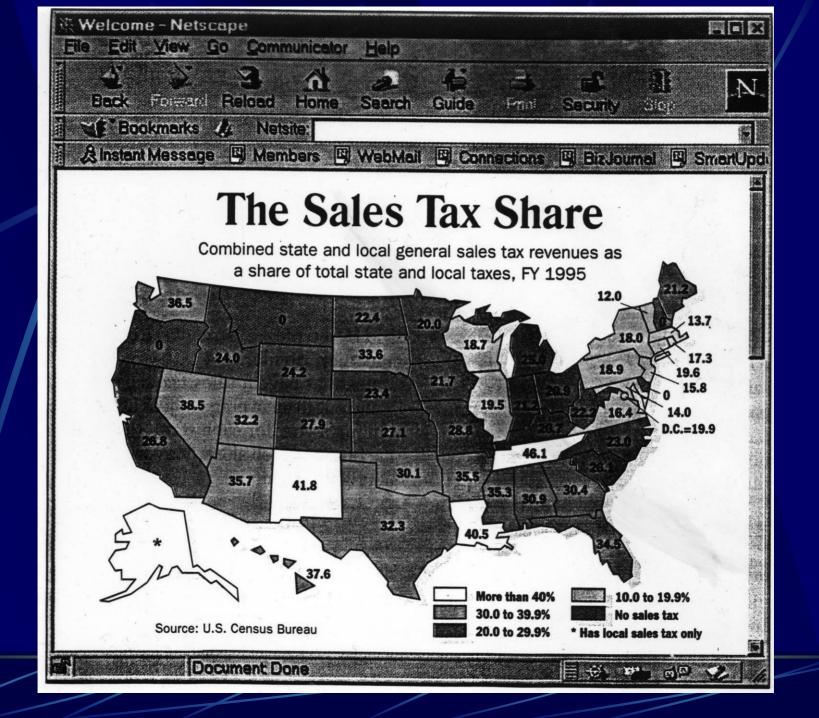
- The Good—Information technologies, reengineering, improved services, greater efficiencies, etc.
- The Bad
 Loss of public sector revenues from electronic transactions.
- The UGLY—Implementing the first and resolving the political conflict of the second.

Defining Electronic Commerce

- The broad definition includes "all financial and commercial transactions that take place electronically, including electronic data interchange (EDI), electronic funds transfer (EFT) and all credit/debit card activity.
- Others limit electronic commerce to retail sales to consumers for which the transaction and payment take place on open networks like the Internet.
- The first type refers to forms of electronic commerce that have existed for decades and result in trillions of dollars worth of activity every day. The second type has existed for about three years and is barely measurable."

Sales Tax Nexus

- National Bellas Hess, Inc. v. IL Revenue Dept. (1967) States can not force vendors that lack physical presence in the state to collect sales tax; state action violates Due Process and Commerce Clauses, ruled Supreme Court.
- Quill Corp. v. North Dakota (1992) Similar to above except the Court ruled on the Commerce Clause only. This means that Congress can redefine the legal definition of nexus for sales tax purposes.



Internet Tax Freedom Act

- New and Emerging Industry
- On-Line Services are Different from Other Information Services that are Taxed
- Industry Can't Comply with Different Rates and Rules—Too Many Taxing Jurisdictions
- Providers Do Not Have Substantial Presence in these States—the NEXUS Problem

Economic Theory

- In 1937, Ronald Coase wrote an article: **The Nature of the Firm**. He asked, "...if production is regulated by price movements...why is there any organization?" Coase won the Noble prize for Economics in 1991.
- Information Technologies (IT) can be defined simply as three Cs: Computing, Communications, and Convergence (digital) of the first two.
- Advances in IT has lowered transaction costs, allowing organizations to be transformed and new ventures to sprout like weeds.

E-commerce and Distribution Costs

US \$ per	Airline Tickets	Banking	Bill Payment	Term Life Ins.	Software Dist.
Traditional System	8.0	1.08	2.22 to 3.32	400- 700	15.00
Telephone System		0.54			5.00
Internet- based	1.0	0.13	0.65 to 1.10	200- 300	0.20 to 0.50
Savings (%)	87	89	71 to 67	50	97 to 99

Information Technologies Are Driving Force in U.S. Economy

- I.T. share of US economy (includes computing and communications) rose from 6.4 % in 1993 to 8.2 percent in 1998; IT contributes more to GDP than automobile and aerospace industries combined.
- Fewer than 5,000 computer programmers in America in 1960; now there are more than 1.3 million.

I T is Driving Force in U.S. Economy

- Average number of E-mail messages sent in US in 1998: 2.1 billion. Average pieces of mail handled daily by U.S. Postal Service in May 1998: 630 million.
- Traffic on the Internet doubled every 100 days in 1995-96; now it is increasing at 100% each year.

Top U.S. Companies

Microsoft (\$602); General Electric (\$507); Cisco (\$366); Wal-Mart (\$307); Intel (\$275); Lucent Technologies (\$235); Exxon Mobil (\$195); IBM (\$194); Citigroup (\$187); **AOL** (\$169); American Intl Group (\$167); SBC Communications (\$165); AT&T (\$162); Oracle (\$160); Home Depot (\$158); Merck (\$157); Yahoo! (\$152); MCI WorldCom (\$151); Proctor & Gamble (\$144); Coca-Cola (\$143); Johnson & Johnson (\$143); Dell Computer (\$130); Bristol-Myers Squibb (\$127); Pfizer (\$125); Sun Microsystems (\$120).

Aggregation and Disaggregation

Megamergers beginning in 1998 (in billions): Exxon & Mobil (\$86 billion); Travelers & Citibank (\$73 b); SBC Communications & Ameritech (\$72 b); Bell Atlantic & GTE (\$71 b); AT&T & Tele-Communications (\$70 b); Nationsbank & BankAmerica (\$62 b); British Petroleum & Amoco (\$55 b); Daimler-Benz & Chrysler (\$40 b); Norwest & Wells Fargo (\$34 b); and Banc One & First Chicago (\$30 b).

Merger Mania Continues

- Megamergers in 1999 and 2000:
- Vodafone Air Touch and Mannesmann A.G. (\$180 billion);
- AOL and Time Warner (\$165 billion);
- AT&T and Media One (\$58 billion).

Transnational Corporations

- According to the United Nations' report, there are now 40,000 transnational corporations—three times the number 25 years ago.
- They control one-third of all private sector assets.
- Their combined Gross Domestic Product in 1993 was \$5.5 trillion (Roughly equivalent to that of the U.S. domestic economy.)
- One-third of trade flows are payments within these transnational companies.

What Do They Want?

- Access to growing markets ("safe, secure, open markets")
- Level-playing field (i.e., no preferences by governments to competitors)
- Uniform standards and regulations.

The Internet Lottery

	<u>Jan. 1998</u>	<u>Jan. 1999</u>	Gain (+)
Amzn.com	\$1,366	\$18,497	\$17,131
AOL	\$9,667	\$80,003	\$70,336
Yahoo!	\$2,502	\$34,961	\$32,459

Internet Winners (until March 2000) and Losers

- America OnLine (IPO March 19, 1992) Stock value up by 50,733%.
- Microsoft (IPO March 1, 1986) Stock value up by 32,082%.
- Yahoo! (IPO April 12, 1996) Stock value up by 16,215%.
- AutoByTel.com (IPO March 26, 1999 Stock value down 16%.
- Peapod (IPO June 11, 1997) Stock value down by 21%.

Exponential Growth of E-commerce

 "Forrester Research predicts Web sales to consumers will surpass \$108 billion in 2003 and revenues will increase at a 69 percent compound annual growth rate accounting for 6 percent of the \$1.8 trillion in U.S. consumer retail spending."

Clicks and Mortar

- Will "bricks and mortar" retailing survive? Gartner Group predicts b-to-c e-commerce in U.S. will reach \$147 billion in 2003, seven times the \$20.5 billion it forecast for 1999.
- Dot-coms are dying like flies, yet
 Amazon.com had 14 million web visitors in
 January 2000. Economic transactions are
 based on trust. Note Charles Schwab's
 business model: "Clicks and Mortar."

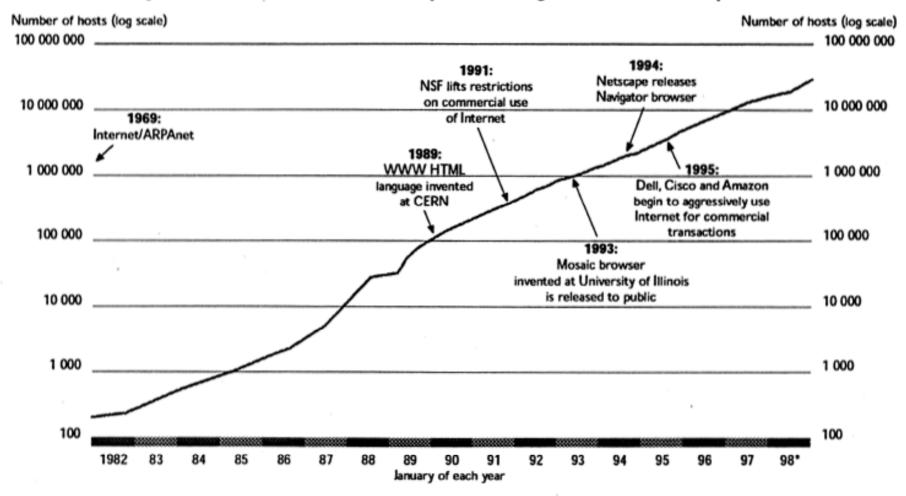
Why has the Federal Government Kept Its Hands off the Internet?

- The real-politic view (i.e., the campaign finance and public policy nexus)
- Market Ideology Transcendent
- National Interest to Promote Our Competitive Advantage
- All of the above.

"The information age is built on the economics of networks, not the economics of factories."

- In the spring of 1999, AOL had a market capitalization almost greater than Ford, General Motors, and Boeing combined.
- In January 2001, AOL completed its merger with Time-Warner, a global media powerhouse. Not bad for a firm that had convinced Congress that it should be spared the responsibility of collecting sales/use taxes on Internet access. Some infant industry.

Figure 1. Growth in Internet host computers and major e-commerce developments



New methodology used in January 1998.
 Source: Network Wizards.

Diffusion is Accelerating

- Radio was in existence 38 years before 50 million people turned in.
- TV took thirteen years to reach that benchmark.
- Sixteen years after the first PC kit came, fifty million people were using one.
- Once opened to the general public, the Internet crossed that line in four years.

America the Connected

- 79% of Americans have cable or satellite television
- 59% have home computers
- 109 million subscribers have cell phones—three times the number five years ago
- Almost half have Internet access at home
- 29% log on to the Internet on a typical day
- 12% have personalized Web pages for their investment portfolios.

Downloading The Times . . . 10 Times

Time typically needed to download a 10-megabyte file (about the file size of all the words, except advertising, in 10 copies of this newspaper)



Dial-up modem (56k) 25 minutes



Integrated services digital network (ISDN)
10.5 minutes



Home satellite dish 3,3 minutes



Digital subscriber line (D.S.L.)
2.5 minutes

Cable modem

1.3 minutes

9 5

T1 line

51 seconds

The New York Times

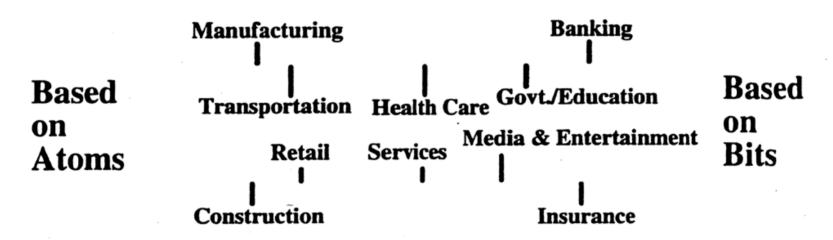
Source: Bell Atlantic

Digital Laws of the New Economy

- Moore's Law—Computing power doubles every 18 months.
- Metcafe's Law-Value of joining network increases exponentially as more join it.
- Gilder's Law—Total bandwidth of communications systems will triple every 12 months in coming decade.
- Gates' Law—Cannibalize your own product to keep first-mover advantage.

The Dual Economy in the Digital Century

Figure 13-3. Potential for transformation, major industry sectors.



Source: David C. Moschella, Waves of Power (NY:AMACOM, 1997, Figure 13-3, 224)

Knowledge as a Factor of Production in Digital Age

 "The basic economic resource—the means of production...is no longer capital, nor natural resources (the economist's land), nor labor. It is and will be knowledge...Value is now created by productivity and innovation, both applications of knowledge to work." Peter Drucker, 1993.

Knowledge as a Factor of Production in Digital

Age

 "Whereas at one time, the decisive factor of production was land, and later capital...today the decisive factor is increasingly man himself, that is, his knowledge."—Pope John Paul II, 1991

"The new source of wealth is not material, it is information, knowledge applied to work to create value."- Walter Wriston, former Citibank CEO

Knowledge as a Factor of Production in Digital

 "Intellectual capital is intellectual material—knowledge, information, intellectual property, experience—that can be put to use to create wealth. It is collective brainpower." Thomas Stewart, 1997

 Regional economies are becoming more integrated into the global economy. International trade and direct foreign investment are growing faster than world output.

 Capital and other factors of production in the digital age are increasingly mobile. Walter Wriston has noted, "Money goes where it is wanted and stays where it is well-treated."

 The digital revolution will enable a growing share of knowledge work to be performed anywhere in the world. Peter Drucker observes, "Knowledge knows no boundaries."

· The trend of declining placebased investments by the federal government will increase the burden on state and local governments to ensure the economic viability of their communities.

A Conservative Approach to State Government

Make it do,
Wear it out,
Use it up, or
Do without.

Competing in the New Economy: Governance Strategies in the Digital Age (2000)

www.Xlibris.com

www.b&n.com

www.amazon.com or

888.795.4274

State Tax Problems

- State Tax Structure is Antiquated;
- Taxes Do Not Match Modern Economy;
- Commerce in a Democracy has political voice;
- Sales taxes are vulnerable; and
- Business activity taxes under attack.

Three Suggestions

- Provide sufficient revenues to enable
 States to be responsive to public needs
- Range of taxes is better than heavy reliance on a few (every tax is imperfect in its own way)
- Taxes with low rates and broad base minimize economic distortions.

Wither the State Sales Tax?

- Either expand the base (by including personal services and digital content) while lowering the rate....Or,
- Drop the sales tax completely.

Is Federalism at Risk?

- Genius of federalism is decentralized autonomy.
- Social learning is advanced by state experimentation and innovation.
- Elected officials need sufficient tax revenues to have autonomy and be responsive to public needs.